

REMARKS

Applicant respectfully requests reconsideration of the rejection of this application as examined pursuant to the office action of March 23, 2006. In the office action, Claims 1-14 were examined. By the accompanying amendment Claims 2 and 3 have been cancelled. New Claims 15-22 have been added. Claims 1 and 4-22 are pending. Two independent claims (Claims 1 and 15) and 20 total claims remain pending. Therefore, no additional filing fee is required.

In the office action, Claims 1-4 and 14 were rejected under 35 USC § 102(b) as being anticipated by US Patent No. 4,025,434 issued to Mladota. Claims 1-8 were rejected under 35 USC § 102(b) as being anticipated by US Patent No. 3,826,374 issued to Busse et al. Claim 9 was rejected under 35 USC § 103(a) as being unpatentable over Busse in view of US Patent No. 5,567,327 issued to De Haan et al. Claim 10 was rejected under 35 USC § 103(a) as being unpatentable over Mladota in view of US Patent No. 5,055,205 issued to White. Claim 11 was rejected under 35 USC § 103(a) as being unpatentable over Busse in view of US Patent No. 5,192,434 issued to Moller. Claim 12 was rejected under 35 USC § 103(a) as being unpatentable over Mladota in view of US Patent No. 1,928,163 issued to Barnard. Claim 13 was rejected under 35 USC § 103(a) as being unpatentable over Busse in view of US Patent No. 4,362,617 issued to Klepper.

Applicant has taken this opportunity to amend independent Claim 1 to further and more clearly distinguish the present invention from the devices described in the cited references. In addition, new independent Claim 15 directed to the catalyst retaining version of the invention describes that version of the invention with similar distinction. Specifically, Claim 1 has been amended to note that the system of the present invention enables the movement of a filter into an out of a fluid transfer duct without requiring a halt of the transfer of the fluid through the duct. In particular, the claim states that the duct is arranged to allow the fluid to pass therethrough, and that an inside of the duct includes a first rail and a second rail. That interior duct arrangement allows for slidable movement of the first and second channels of the filter frame on the first and second rails of the duct. Further, the first rail and the second rail are arranged such that when the filter frame is positioned within the duct, the fluid passes through the one or more filter components of the filter frame. Finally, the duct includes means to establish a sealing fit between the inside of the duct and the filter frame such that the filter frame may be moved into

and out of the duct without halting the transfer of fluid through the duct. These features of the system of the present invention clearly distinguish it from the references cited as stated more fully herein. Applicant notes that the amendment made to independent Claim 1 and the corresponding addition of new independent Claim 15 are fully supported in the original specification at page 9, paragraphs [029] and [030], and page 10, paragraph [031].

The 35 USC § 102(b) Rejections

Claims 1-4 and 14 as filed were rejected as being anticipated by Mladota. Applicant respectfully suggests that Mladota is not applicable art as it is related to a plastics extruder and not a fluid transfer system, particularly one suitable for the transfer of hot flue gases, for example. This is clear from a review of the reference, in which Mladota states that the device is placed between a plastics extruder and a die and also discusses the need for fill and purge conduits for plastic redirection. Mladota appears to make no mention of the suitability of the device described therein for the purpose of continuous operation of fluid transfer without halting to accommodate filter change-out. Further, the Mladota reference fails to anticipate the present invention as described by amended Claim 1 and related new independent Claim 15. Specifically, Claim 1 now states that the system includes the duct, which duct inside includes a first and second rail for retaining thereon channels of the filter frame for sliding engagement thereon. Mladota has no such interior duct modification. In the Mladota device, the plastic filter simply slides through the passageway.

The present invention also includes means to provide a sealing fit between the duct and the frame to allow movement of the frame in and out of the duct without halting fluid movement within the duct. This is an important feature when the fluid is a hot flue gas. Mladota does not teach or suggest the need to establish such a sealing fit and instead teaches away from it through the inclusion of the purge conduit, which specifically allows for the “fluid” plastic to pass out of its passageway 22. This aspect of the present invention is included in amended Claim 1 and in related new independent Claim 15.

Finally in regard to the inapplicability of the Mladota reference it is to be noted that the multiple frame unit described in the reference appears clearly to require the application of a frame support body (ref 21 of Mladota) that far exceeds the size of the conduit for the flowing plastic. Moreover, it appears that the Mladota device requires the modification of the plastic

passageway to be increased in cross-sectional dimension to accommodate the filter itself. That is, in the transfer from the plastic extruder to the plastic die, this modified filter structure proposed by Mladota changes the fluid dynamics and is likely a substantial addition to the plastic fabrication manufacturing steps. The present invention, on the other hand, is designed to be incorporated into the existing fluid transfer system, such as that of a Selective Catalyst Reactor of a power generation system. The system of the present invention may be used with no change in the structural dimensions of the fluid pathway and only modest modification to the pathway duct.

The present invention is used for a completely different purpose than that of the Mladota device. Further, its arrangement is readily incorporated into existing relevant fluid transfer systems. Finally, the present system as described by the amended claims includes features not found in the Mladota device and which enable changing out of a filter (or a catalyst bed) without halting the fluid transfer process. Mladota fails to teach or suggest such features. Applicant respectfully suggests that the rejection of Claims 1-4 and 14 based on Mladota has been successfully traversed. Withdrawal of that rejection is therefore requested.

Claims 1-8 were rejected as being anticipated by Busse. Applicant respectfully suggests that Busse is even farther removed from the present invention than is the Mladota device. The Busse device relates to filter presses. That is, a device to screen and retain solids entrained in a liquid for the purpose of using the solids as a product. The goal of such a device is to capture the solids for use, not to make the fluid cleaner. On the other hand, the present invention is directed to the function of cleaning a fluid to be passed along for further processing. In addition, these filter presses associated with the Busse device are operated in a batch format rather than a continuous format, thereby rendering substantially irrelevant the desire for continued fluid passage while minimizing solids build up. Moreover, Busse clearly states that the goal of that device is to facilitate the movement of groups of filter plates to ease the process of opening the filter press.

Amended Claim 1 of the application clearly distinguishes the present invention from the device described by Busse. First, the present invention includes a duct modified to include rails therein on which filter frame channels can slidingly move. Busse, on the other hand, suspends filter plates on rollers located above rails which are located above the plates. It appears that the

rollers are located outside of the fluid field, whereas the present invention places the filter frame within the fluid pathway inside the duct. Second, the present invention includes means to ensure a sealing fit of the frame with the interior of the duct such that the frame may be moved out of the duct without halting fluid transfer. That is, the present invention allows for continuous movement of the fluid through the system of which it forms a part. The Busse reference does not suggest the importance of allowing continuous fluid movement through a duct, may not really have a duct in the sense of the present invention, and certainly provides no indication that a sealing fit is provided or even of use.

These and other features of the present invention are incorporated into amended Claim 1 and new Claim 15. Busse, in addition to being inapplicable art, fails to describe such features in the press plate filter. Applicant respectfully suggests that the rejection of Claims 1-8 based on Busse has been successfully traversed. Withdrawal of that rejection is therefore requested.

The 35 USC § 103(a) Rejections

Dependent Claim 9 was rejected as being obvious in view of the combination of Busse and De Haan. Applicant incorporates herein by reference the remarks made above regarding the Busse reference. The De Haan reference is limited as being directed apparently to describing a filter system with air jets. The De Haan reference, like the Busse reference, is directed to a press plate for filtering solid cakes from fluids. Therefore, as Applicant has suggested regarding the Busse reference, De Haan is simply not applicable art. Moreover, it is to be noted that the air jets described by De Haan are employed to blast solid cake off of the filter element. Nowhere does De Haan teach or suggest providing a means to establish a sealing fit between the interior of a duct of a fluid transfer system and a filter or catalyst bed to be moved in and out of that duct without halting fluid transfer operations. In fact, De Haan only suggests using air to separate a solid from a filter. De Haan never suggests using air jets as a sealing mechanism.

Applicant respectfully suggests that De Haan fails to teach the sealing fit of the present invention and fails to teach the use of air jets as a sealing mechanism in such a filter/catalyst transfer arrangement as described by the presently pending claims as amended. For these reasons, Applicant respectfully suggests that the rejection of dependent Claim 9 based on Busse and De Haan has been successfully traversed. Withdrawal of that rejection is therefore requested.

Dependent Claim 10 was rejected as being obvious in view of the combination of Mladota and White. Applicant incorporates herein by reference the remarks made above regarding the Mladota reference. The White reference has apparently been cited for the limited purpose of teaching a guillotine damper gate drive in a filter system. White is directed to a rotary drum filter, which is completely unrelated to continuous fluid transfer systems of the type associated with the present invention. Further, White fails to teach or suggest a duct and frame arrangement as described in the pending amended claims. Applicant does not contend that a guillotine damper drive is a novel aspect of the present invention. However, its use in combination with the duct and frame assembly of amended independent Claim 1 is, and neither White alone or in combination with Mladota suggests the present invention as now claimed.

Applicant respectfully suggests that the rejection of dependent Claim 10 based on Mladota and White has been successfully traversed. Withdrawal of that rejection is therefore requested.

Dependent Claim 11 was rejected as being obvious in view of the combination of Busse and Moller. Applicant incorporates herein by reference the remarks made above regarding the Busse reference. The Moller reference has apparently been cited for the limited purpose of teaching the use of a spindle in a filter system. White is directed to a membrane filter system, which is also completely unrelated to continuous fluid transfer systems of the type associated with the present invention. Further, Moller fails to teach or suggest a duct and frame arrangement as described in the pending amended claims. Applicant does not contend that the use of a spindle in a drive system is a novel aspect of the present invention. However, its use in combination with the duct and frame assembly of amended independent Claim 1 is, and neither Moller alone or in combination with Busse suggests the present invention as now claimed.

Applicant respectfully suggests that the rejection of dependent Claim 11 based on Busse and Moller has been successfully traversed. Withdrawal of that rejection is therefore requested.

Dependent Claim 12 was rejected as being obvious in view of the combination of Mladota and Barnard. Applicant incorporates herein by reference the remarks made above regarding the Mladota reference. The Barnard reference has apparently been cited for the limited

purpose of teaching a rack-and-pinion or worm gear drive in a filter system. Barnard is directed to a sewage treatment system, and therefore is even farther removed from the present invention than the other references cited in the March 23, 2006, office action. That is, the system described by Barnard and to which the drive system described therein is related is completely unrelated to continuous fluid transfer systems of the type associated with the present invention. Further, Barnard fails to teach or suggest a duct and frame arrangement as described in the pending amended claims. Applicant does not contend that a rack-and-pinion or worm gear drive is a novel aspect of the present invention. However, its use in combination with the duct and frame assembly of amended independent Claim 1 is, and neither Barnard alone or in combination with Mladota suggests the present invention as now claimed.

Applicant respectfully suggests that the rejection of dependent Claim 12 based on Mladota and Barnard has been successfully traversed. Withdrawal of that rejection is therefore requested.

Dependent Claim 13 was rejected as being obvious in view of the combination of Busse and Klepper. Applicant incorporates herein by reference the remarks made above regarding the Busse reference. The Klepper reference has apparently been cited for the limited purpose of teaching the use of a ball-and-screw actuator assembly in a filter system. Klepper is directed to fluid filter removal system not related to continuous fluid transfer systems of the type associated with the present invention. Further, Klepper fails to teach or suggest a duct and frame arrangement as described in the pending amended claims. Applicant does not contend that the use of a ball-and-screw actuator assembly in a drive system is a novel aspect of the present invention. However, its use in combination with the duct and frame assembly of amended independent Claim 1 is, and neither Klepper alone or in combination with Busse suggests the present invention as now claimed.

Applicant respectfully suggests that the rejection of dependent Claim 13 based on Busse and Klepper has been successfully traversed. Withdrawal of that rejection is therefore requested.

Applicant respectfully notes that the new claims added are fully supported in the specification as filed and therefore add no new subject matter. Applicant submits that these

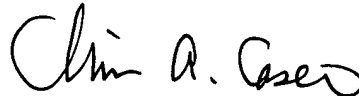
claims would overcome any rejection of the type presented in the March 23, 2006, office action with respect to independent Claim 1 as amended.

CONCLUSION

In view of the foregoing amendments made to the claims and the remarks made herein, Applicant respectfully suggests that the rejections under 35 §§ 102(b) and 103(a) have been successfully traversed. Allowance of pending Claims 1 and 4-22 is therefore requested.

By this amendment, two dependent claims have been cancelled and eight new claims have been added, one of which is independent. The total number of claims presently pending is 20, and the number of presently pending independent claims is two. Therefore, no additional filing fee is required.

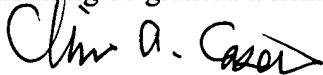
Respectfully submitted,



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I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on September 25, 2006. It is hereby requested that this filing be granted a filing date of September 25, 2006.



Chris A. Caseiro